

Attorney Docket No. H0498/7084

## DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

## OPTICAL MODULATOR/DETECTOR BASED ON RECONFIGURABLE DIFFRACTION GRATING

the specification of which is attached hereto unless the following is checked:

[X] was filed on 10/22/99, as United States Application No. 09/425,787 or PCT  
(Include Serial Code)  
International Application No. \_\_\_\_\_, bearing attorney docket No. \_\_\_\_\_,  
and was amended on \_\_\_\_\_ (if applicable).

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I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or section 365(a) of any PCT International application designating at least one country other than the United States listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign PCT International Application(s) and any priority claims under 35 U.S.C. §§119 and 365(a), (b):

(Number)	(Country-if PCT, so indicate)	(DD/MM/YY Filed)	Priority Claimed
			[ ] [ ]
			YES NO
			[ ] [ ]
			YES NO
			[ ] [ ]
			YES NO

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

<u>60/078,984</u>	<u>03/23/99</u>
(Application Number)	(filing date)
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Inventor's Signature	Date
Full name of first inventor Olivier J. A. Schueller	
Citizenship France	
Residence & P.O. Address 19 Highland Avenue, Apt. 1, Somerville, MA 02143	

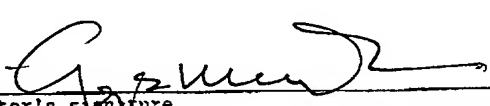
Inventor's signature	Date
Full name of second inventor David C. Duffy	
Citizenship Great Britain	
Residence & P.O. Address 18 Forest Street, Cambridge, MA 02140	

\_\_\_\_\_  
Inventor's signature  
Full name of third inventor John A. Rogers  
Citizenship United States  
Residence & P.O. Address 1200 Springfield Avenue, Apt. 1C, New Providence, NJ 07974

\_\_\_\_\_  
Date

\_\_\_\_\_  
Inventor's signature  
Full name of fourth inventor Scott T. Brittain  
Citizenship United States  
Residence & P.O. Address 2048 Jane Lane, Southside, AL 35907

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Inventor's signature  
Full name of fifth inventor George M. Whitesides  
Citizenship United States  
Residence & P.O. Address 124 Grasmere Street, Newton, MA 02158

  
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Citizenship United States

  
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Date \_\_\_\_\_

Full name of fourth inventor Scott T. Brittain

Residence & P.O. Address 2048 Jane Lane, Southside, AL 35907

Date \_\_\_\_\_

Full name of fifth inventor      George M. Whitesides

Citizenship United States

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Residence & P.O. Address 124 Grasmere Street, Newton, MA 02158

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2
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REV

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FOOTNOTES

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and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or section 365(a) of any PCT International application designating at least one country other than the United States listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign PCT International Application(s) and any priority claims under 35 U.S.C. §§119 and 365(a), (b):

(Number)	(Country-if PCT, so indicate)	(DD/MM/YY Filed)	Priority Claimed
			[ ] [ ]
			YES NO
			[ ] [ ]
			YES NO
			[ ] [ ]
			YES NO

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

60/078,984	03/23/98
(Application Number)	(filing date)
_____	_____
(Application Number)	(filing date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT International application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56

which became available between the filing date of the prior application and the national or PCT International filing date of this application:

(Application No.)	(filing date)	(status-patented, pending, abandoned)
(Application No.)	(filing date)	(status-patented, pending, abandoned)

PCT International Applications designating the United States:

(PCT Appl. No.)	(U.S. Ser. No.)	(PCT filing date)	(status-patented, pending, abandoned)
(PCT Appl. No.)	(U.S. Ser. No.)	(PCT filing date)	(status-patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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Peter C. Lando	34,654	Michael G. Verga	39,410	Joseph Teja, Jr.	P-45,157
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Full name of first inventor Olivier J. A. Schueller  
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Date

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Date

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Full name of fourth inventor Scott T. Brittain  
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Date \_\_\_\_\_

Inventor's signature \_\_\_\_\_  
Full name of fifth inventor George M. Whitesides  
Citizenship United States  
Residence & P.O. Address 124 Grasmere Street, Newton, MA 02158

Date

Parameter	Value	Unit
Temperature	25.0	°C
Pressure	1.0	atm
Flow rate	1.0	L/min
Concentration	0.1	mol/L
pH	7.0	
Wavelength	254	nm
Scan rate	1.0	nm/min
Integration time	1.0	s
Resolution	0.5	nm
Detector	Photodiode array	
Injection volume	10	μL
Column	C18	
Mobile phase	Water/Acetonitrile	
Gradient	0-100% ACN in 10 min	
Flow rate	1.0	mL/min
Temperature	30.0	°C
Wavelength	254	nm
Scan rate	1.0	nm/min
Integration time	1.0	s
Resolution	0.5	nm
Detector	Photodiode array	
Injection volume	10	μL
Column	C18	
Mobile phase	Water/Acetonitrile	
Gradient	0-100% ACN in 10 min	
Flow rate	1.0	mL/min
Temperature	30.0	°C
Wavelength	254	nm
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Temperature	30.0	°C
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Flow rate	1.0	mL/min
Temperature	30.0	°C
Wavelength	254	nm
Scan rate	1.0	nm/min
Integration time	1.0	s
Resolution	0.5	nm
Detector	Photodiode array	
Injection volume	10	μL
Column	C18	
Mobile phase	Water/Acetonitrile	
Gradient	0-100% ACN in 10 min	
Flow rate	1.0	mL/min
Temperature	30.0	°C
Wavelength	254	nm
Scan rate	1.0	nm/min
Integration time	1.0	s
Resolution	0.5	

COPY

Attorney's Docket No. H0498/7084

Applicants: Olivier J.A. Schueller et al.  
Serial No.: 09/425,787  
Filed: October 22, 1999  
For: OPTICAL MODULATOR/DETECTOR BASED ON RECONFIGURABLE  
DIFFRACTION GRATING

**DECLARATION CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(e) and 1.27(d) - NONPROFIT ORGANIZATION)**

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION: PRESIDENT AND FELLOWS OF HARVARD COLLEGE  
ADDRESS OF ORGANIZATION: University Place, 4th Floor South,  
124 Mount Auburn Street, Cambridge, MA 02138-5701

TYPE OF ORGANIZATION: UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees under section 41 (a) and (b) of Title 35, United States Code with regard to the invention entitled OPTICAL MODULATOR/DETECTOR BASED ON RECONFIGURABLE DIFFRACTION GRATING by inventor(s), Olivier J.A. Schueller, David C. Duffy, John A. Rogers, Scott T. Brittain and George M. Whitesides, described in

- ☐ the specification filed herewith  
☒ application serial no. 09/425,787, filed October 22, 1999.  
☐ patent no. \_\_\_\_\_, issued \_\_\_\_\_.

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual concern or organization having rights to the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

- ☒ no such person, concern, or organization  
☐ persons, concerns or organizations listed below\*

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

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-2-

CONFIDENTIAL

FULL NAME  
ADDRESS

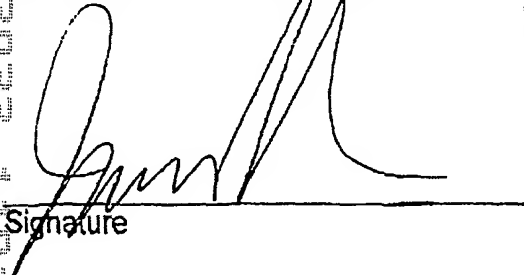
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING  
TITLE IN ORGANIZATION  
ADDRESS OF PERSON SIGNING

Joyce Brinton  
Director  
Office for Technology and Trademark Licensing  
Harvard University, University Place, Fourth Floor South  
124 Mount Auburn Street, Cambridge, MA 02138-5701

  
Signature

Date 3/27/00

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\*\* TOTAL PAGE.03 \*\*

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